

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

<b>IN THE MATTER OF:</b>	)	<b>FINDING OF VIOLATION</b>
	)	
The Kroger Company	)	EPA-5-20-COE-07
Cincinnati, Ohio	)	
	)	
Proceedings Pursuant to	)	
<u>the Clean Air Act, 42 U.S.C. §§ 7401 et seq.</u>	)	

**FINDING OF VIOLATION**

The U.S. Environmental Protection Agency (EPA) finds that The Kroger Company (Kroger) is violating the Clean Air Act (CAA), 42 U.S.C. § 7401 *et seq.* Specifically, Kroger failed to comply with 40 C.F.R. Part 82, Subpart F, as follows:

**Regulatory Authority**

1. Pursuant to Section 608(a) of the CAA, 42 U.S.C. § 7671g(a), EPA promulgated the Chlorofluorocarbon Recycling and Emissions Reduction (CFC RER) rules at 40 C.F.R. Part 82, Subpart F, at 40 C.F.R. §§ 82.150 through 82.169.
2. The CFC RER rules apply to, among others, any person servicing, maintaining, repairing, or owning appliances, as those terms are defined at 40 C.F.R. § 82.152.
3. Until January 1, 2019, 40 C.F.R. § 82.156(j) defined “Appliance” to mean, for the purposes of 40 C.F.R. § 82.156(i), any device which contains and uses a refrigerant and which is used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer.
4. After January 1, 2019, 40 C.F.R. § 82.152 defines “Appliance” to mean any device which contains and uses a refrigerant and which is used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer.
5. 40 C.F.R. § 82.156(j) does not define “Comfort Cooling” for the time period before January 1, 2019.
6. After January 1, 2019, 40 C.F.R. § 82.152 defines “Comfort cooling” to mean “the air-conditioning appliances used to provide cooling in order to control heat and/or humidity in occupied facilities including but not limited to residential, office, and commercial buildings.”
7. Until January 1, 2019, 40 C.F.R. § 82.156(j) defined, “Commercial Refrigeration” to mean, for the purposes of 40 C.F.R. § 82.156(i), the refrigeration appliances utilized in the retail food and cold storage warehouse sectors. Retail food includes the

refrigeration equipment found in supermarkets, convenience stores, restaurants and other food service establishments.

8. After January 1, 2019, 40 C.F.R. § 82.152 defines “Commercial refrigeration” to mean the refrigeration appliances used in the retail food and cold storage warehouse sectors. Retail food appliances include the refrigeration equipment found in supermarkets, convenience stores, restaurants and other food service establishments.
9. Until January 1, 2019, 40 C.F.R. § 82.156(j) defined “Industrial process refrigeration” to mean, in part and for the purposes of 40 C.F.R. § 82.156(i), “complex customized appliances used in the chemical, pharmaceutical, petrochemical and manufacturing industries.”
10. Until January 1, 2019, 40 C.F.R. § 82.156(j) defined “Leak Rate” as, for the purposes of 40 C.F.R. § 82.156(i), the rate at which an appliance is losing refrigerant, measured between refrigerant charges. The rate is calculated using only one of two methods [Method 1 or Method 2] set forth in the definition. The same method must be used for all appliances located at an operating facility.
11. After January 1, 2019, 40 C.F.R. § 82.152 defines “Leak Rate” as the rate at which an appliance is losing refrigerant, measured between refrigerant charges. The rate must be calculated using one of two methods [Method 1 or Method 2] set forth in the definition. The same method must be used for all appliances subject to the leak repair requirements located at an operating facility.
12. The pre- and post-January 1, 2019, definitions of “Leak Rate” include identical equations for Method 1 and identical equations for Method 2.
13. The CFC RER rule allows the owner or operator of a CCA or CRA normally containing more than 50 pounds of refrigerant to use either Method 1 or Method 2. On January 11, 2005, in promulgating the definition of “Leak Rate,” EPA stated, in part:

EPA is defining leak rate using the fourth option which allows appliance owners or operators to use either of the two methods of their choice, provided the option chosen is used consistently for calculating leak rates for the lifetime of all appliances located at an operating facility that are subject to the leak repair requirements.

*See* 70 Fed. Reg. 1977.

14. 40 C.F.R. § 82.152 defines “person” as “any individual or legal entity, including an individual, corporation, partnership, association, state, municipality, political subdivision of a state, Indian tribe, and any agency, department, or instrumentality of the United States, and any officer, agent, or employee thereof.”

15. Until January 1, 2019, 40 C.F.R. § 82.156(j) defined “Refrigerant” as, for the purposes of 40 C.F.R. § 82.156(i), “any substance consisting in part or whole of a class I or class II ozone-depleting substance (ODS) that is used for heat transfer purposes and provides a cooling effect.”
16. After January 1, 2019, 40 C.F.R. § 82.152 defines “Refrigerant” as “any substance, including blends and mixtures, consisting in part or whole of a class I or class II ozone-depleting substance or substitute that is used for heat transfer purposes and provides a cooling effect.”
17. 42 U.S.C. §7671a lists class I and class II ODSs. 42 U.S.C. § 7671a(b) names hydrochlorofluorocarbon-12 (HCFC-12) as a class I ODS and hydrochlorofluorocarbon-22 (HCFC-22) as a class II ODS.
18. Hydrochlorofluorocarbon-12, whose chemical name is dichlorodifluoromethane, is a chlorofluorocarbon that is sold under the trade name R-12.
19. Hydrochlorofluorocarbon-22, whose chemical name is chlorodifluoromethane, is a chlorofluorocarbon that is sold under the trade name R-22.
20. 40 C.F.R. § 82.152 defines “technician,” in part, as “any person who performs maintenance, service, or repair, that could be reasonably expected to release refrigerants from appliances, except for [motor vehicle air conditioners], into the atmosphere.”
21. Until January 1, 2019, 40 C.F.R. § 82.156(i)(1) required, in part:

Owners or operators of commercial refrigeration equipment normally containing more than 50 pounds of refrigerant must have leaks repaired in accordance with paragraph (i)(9) of this section, if the appliance is leaking at a rate such that the loss of refrigerant will exceed 35 percent of the total charge during a 12-month period. . . . Repairs must bring the annual leak rate to below 35 percent.
22. Until January 1, 2019, 40 C.F.R. § 82.156(i)(2) required, in part:

The owners or operators of industrial process refrigeration equipment normally containing more than 50 pounds of refrigerant must have leaks repaired if the appliance is leaking at a rate such that the loss of refrigerant will exceed 35 percent of the total charge during a 12-month period in accordance with paragraph (i)(9) of this section.... Repairs must bring annual leak rates to below 35 percent during a 12-month period.
23. Until January 1, 2019, 40 C.F.R. § 82.156(i)(5) required, in part:

Owners or operators of comfort cooling appliances normally containing more than 50 pounds of refrigerant and not covered by paragraph (i)(1) or (i)(2) of this section

must have leaks repaired in accordance with paragraph (i)(9) of this section if the appliance is leaking at a rate such that the loss of refrigerant will exceed 15 percent of the total charge during a 12-month period. . . . Repairs must bring the annual leak rate to below 15 percent.

24. Until January 1, 2019, 40 C.F.R. § 82.156(i)(6) required, in part:

Owners or operators are not required to repair leaks as provided in paragraphs (i)(1), (i)(2), and (i)(5) of this section if, within 30 days of discovering a leak greater than the applicable allowable leak rate, or within 30 days of a failed follow-up verification test, or after making good faith efforts to repair the leaks as described in paragraph (i)(6)(i) of this section, they develop a one-year retrofit or retirement plan for the leaking appliance.

25. Until January 1, 2019, 40 C.F.R. § 82.156(i)(9) required, in part:

Owners or operators must repair leaks pursuant to paragraphs (i)(1), (i)(2) and (i)(5) of this section within 30 days after discovery, or within 30 days after when the leaks should have been discovered if the owners intentionally shielded themselves from information which would have revealed a leak....

26. After January 1, 2019, 40 C.F.R. § 82.157(a) requires:

(a) Applicability. This section applies as of January 1, 2019. This section applies only to appliances with a full charge of 50 or more pounds of any class I or class II refrigerant or any non-exempt substitute refrigerant. Unless otherwise specified, the requirements of this section apply to the owner or operator of the appliance.

27. After January 1, 2019, 40 C.F.R. § 82.157(c) requires, in part:

(c) Requirement to Address Leaks through Appliance Repair, or Retrofitting or Retiring an Appliance.

(1) Owners or operators must repair appliances with a leak rate over the applicable leak rate in this paragraph in accordance with paragraphs (d) through (f) of this section unless the owner or operator elects to retrofit or retire the appliance in compliance with paragraphs (h) and (i) of this section. If the owner or operator elects to repair leaks, but fails to bring the leak rate below the applicable leak rate, the owner or operator must create and implement a retrofit or retirement plan in accordance with paragraphs (h) and (i) of this section.

(2) Leak Rates:

(i) 20 percent leak rate for commercial refrigeration equipment;

28. Before and after January 1, 2019, 40 C.F.R. § 82.166(k) requires:

Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep servicing records documenting the date and type of service, as well as the quantity of refrigerant added. The owner/operator must keep records of refrigerant purchased and added to such appliances in cases where owners add their own refrigerant. Such records should indicate the date(s) when refrigerant is added.

29. On September 2, 2015, the Administrator of the Environmental Protection Agency named the Region 5 Administrator as the national ODS center of excellence manager and delegated the authority to take action to enforce the federal requirements for stratospheric ozone protection in all U.S. Environmental Protection Agency regions, pursuant to 40 C.F.R. Part 82 and Title VI of the Clean Air Act.

### **Findings of Fact**

30. Kroger is a “person” as defined at 40 C.F.R. § 82.152.
31. On August 8, 2018, EPA issued a Clean Air Act Section 114 Request for Information (CAA 114 RFI) to Kroger. The August 2018 CAA 114 RFI asked Kroger to submit a list of all comfort cooling appliances (CCA), commercial refrigeration appliances (CRAs), and industrial process refrigeration units (IPRUs) normally containing more than 50 pounds of a class I or class II ODS at all supermarkets or manufacturing facilities owned or operated by Kroger or any of its subsidiaries.
32. In response to the August 2018 CAA 114 RFI, Kroger submitted a list that included 4,625 CCAs and CRAs that use either R12 (49 appliances) or R22 (4,576 appliances) and 21 IPRUs that use R22.
33. On March 4, 2019, EPA issued a second CAA 114 RFI to request information regarding full charges, repairs and refrigerant additions regarding five CCAs and CRAs that use R-12, 351 CCAs and CRAs that use R-22, and 21 IPRUs that use R-22.
34. On April 14 and June 11, 2019, Kroger responded to the March 2019 CAA 114 RFI. Kroger’s June 11, 2019, response to the March 2019 CAA 114 RFI included a spreadsheet providing, among other things, amounts of refrigerant added to CCAs, CRAs, and IPRUs a description of the service or repair conducted and the corresponding date when the service or repair was conducted.
35. Except as otherwise provided below, relevant to this matter, for each service date when Kroger added refrigerant to a CCA or CRA, Kroger calculated the Leak Rate and reported that it used Method 1. For each service date when Kroger added refrigerant to an IPRU, Kroger calculated a Leak Rate but was not clear whether it used Method 1 or Method 2.

36. In response to questions asking Kroger to state whether the company has developed a retrofit or retirement plan for each CCA, CRA or IPRU with a leak rate greater than its applicable standard, Kroger stated:

Kroger's policy is to fix all refrigeration leaks within the 30-day timeframe so no retirement or retrofit plans have been created for CCA, CRA, or IPRU appliances.

37. On April 14, 2019, Kroger reported the refrigerant additions to the Vilter VMC, a CRA with a full charge of 4,500 pounds, at Home Chef, 1055 E. Cooley Ave., San Bernardino, California. Because Kroger did not specify the leak rate formula that it used for this appliance, EPA calculated the Leak Rates with Method 1 and Method 2:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate	Method 2 Leak Rate
10/05/2018	650	10	527.2%	42.0%

38. On June 11, 2019, Kroger reported the refrigerant additions to CRA 011465RACKA, which has a full charge of 1400 pounds, at store 011::465, 3425 Cascade Rd SW, Atlanta, Georgia. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
4/07/2015	300	6	1303.6%
5/13/2015	180	36	130.4%
6/28/2015	120	46	68.0%
8/05/2015	330	38	226.4%
9/11/2015	250	37	176.2%
10/26/2015	180	45	104.3%
11/03/2015	330	8	1075.4%
12/15/2015	350	42	217.3%
2/01/2016	240	48	130.4%
7/25/2016	300	175	44.7%
8/07/2016	180	13	361.0%
9/01/2016	300	25	312.9%
9/16/2016	240	15	417.1%
11/04/2016	300	49	159.6%
11/28/2016	360	24	391.1%
2/03/2017	390	67	151.8%
2/09/2017	180	6	782.1%
2/09/2017	120	6	521.4%
2/09/2017	480	6	2085.7%
2/11/2017	120	2	1564.3%
4/19/2017	270	67	105.1%

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/08/2017	240	50	125.1%
10/25/2017	420	139	78.8%
10/26/2017	180	1	4692.9%
11/29/2017	150	34	115.0%
12/08/2017	240	9	695.2%

39. On June 11, 2019, Kroger reported the refrigerant additions to CRA 011465RACKB, a CRA with a full charge of 1400 pounds, at store 011::465 3425 Cascade Rd SW, Atlanta, Georgia. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
7/12/2016	360	30	312.9%
7/19/2016	165	7	614.5%
8/12/2016	180	24	195.5%
2/09/2017	150	181	21.6%
4/19/2017	210	69	79.3%
5/03/2017	270	14	502.8%
5/05/2017	450	2	5866.1%
6/22/2017	210	48	114.1%
7/11/2017	60	19	82.3%
3/06/2018	150	2	1955.4%
9/12/2018	300	190	41.2%
10/02/2018	210	20	273.8%
12/17/2018	240	76	82.3%

40. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3441404, a CRA with a full charge of 84 pounds, at store 016::341 2474 Stringtown Rd, Grove City, Ohio. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
2/02/2016	30	189	69.0%

41. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3447324, which has a full charge of 609 pounds, at store 016::529 965 Poplar St, Nelsonville, Ohio. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
11/18/2015	51	51	59.9%
2/26/2016	60	100	36.0%

2/01/2018	30	2	899.0%
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42. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3443365, which has a full charge of 775 pounds, at store 016::880 1608 Marion-Mount Gilead Rd, Marion, Ohio. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/10/2016	240	40	282.6%
5/26/2018	60	43	65.7%

43. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3443367, which has a full charge of 950 pounds, at store 016::880 1608 Marion-Mount Gilead Rd, Marion, Ohio. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
5/08/2015	90	43	80.4%

44. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3487938, which has a full charge of 1200 pounds, at store 018::455 30851 Gratiot Ave, Roseville, Michigan. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
5/31/2018	210	72	88.7%
6/08/2018	60	8	228.1%
6/21/2018	18	13	42.1%

45. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3486007, which has a full charge of 1200 pounds, at store 018::456 200 S Merriman Rd, Westland, Michigan. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
8/28/2015	120	172	21.2%
9/01/2015	60	4	456.3%
9/16/2015	120	15	243.3%
2/16/2016	150	153	29.8%
3/04/2016	180	17	322.1%
4/05/2016	180	32	171.1%



46. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3486008, which has a full charge of 1200 pounds, at store 018::456 200 S Merriman Rd, Westland, Michigan. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
4/27/2015	150	3	1520.8%
5/26/2015	60	29	62.9%
6/03/2015	120	37	98.6%
7/07/2015	240	34	214.7%
6/02/2017	90	72	38.0%

47. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3482686, which has a full charge of 1600 pounds, at store 018::458 23849 West Rd, Brownstown, Michigan. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/01/2016	120	5	547.5%
7/14/2016	150	43	79.6%
10/20/2016	100	33	69.1%
6/09/2017	120	73	37.5%
7/12/2017	180	33	124.4%
7/28/2017	120	16	171.1%
8/21/2017	110	24	104.6%
9/26/2017	150	36	95.1%
10/19/2017	120	23	119.0%
10/30/2017	180	11	373.3%
1/09/2018	150	71	48.2%
2/21/2018	150	43	79.6%
2/28/2018	150	7	488.8%
4/06/2018	210	37	129.5%
5/08/2018	150	32	106.9%
5/29/2018	180	21	195.5%
7/25/2018	180	57	72.0%
8/02/2018	180	8	513.3%

48. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3217358, which has a full charge of 609 pounds, at store 024::757 181 S Highway 27, Somerset, Kentucky. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/04/2015	120	97	74.1%

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
1/18/2016	300	228	78.9%
3/21/2016	390	63	371.0%
6/29/2016	225	100	134.9%
7/18/2016	102	19	321.8%
8/01/2016	119	14	509.4%
8/01/2016	30	14	128.4%
8/08/2016	609	5	7300.0%
12/02/2016	88	116	45.5%
9/14/2017	89	97	55.0%
12/27/2017	119	104	68.6%
7/10/2018	188	18	626.0%

49. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3217365, which has a full charge of 609 pounds, at store 024::757 181 S Highway 27, Somerset, Kentucky. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
7/18/2016	90	118	45.7%
7/21/2016	31	3	619.3%
1/17/2017	228	180	75.9%
12/31/2018	249	313	47.7%

50. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3217366, which has a full charge of 609 pounds, at store 024::757 181 S Highway 27, Somerset, Kentucky. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
10/06/2017	197	241	49.0%

51. On June 11, 2019, Kroger reported the refrigerant additions to CRA ISS966451, which has a full charge of 609 pounds, at store 024::757 181 S Highway 27, Somerset, Kentucky. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
8/04/2015	210	20	629.3%
12/23/2015	90	141	38.3%

52. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3310881, which has a full charge of 800 pounds, at store 034::739 9125 W Sam Houston Pkwy N, Houston, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
4/07/2017	90	50	82.1%

53. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3326527, which has a full charge of 90 pounds, at store 035::688 301 S Bowen Rd, Arlington, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
06/20/2018	90	106	344.3%

54. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3326532, which has a full charge of 120 pounds, at store 035::688 301 S Bowen Rd, Arlington, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
03/15/2016	60	3	6083.3%

55. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3326539, which has a full charge of 150 pounds, at store 035::688 301 S Bowen Rd, Arlington, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
03/06/2017	30	109	67.0%

56. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3326543, which has a full charge of 120 pounds, at store 035::688 301 S Bowen Rd, Arlington, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
02/02/2017	30	202	45.2%
04/13/2017	30	70	130.4%
05/17/2017	15	34	134.2%
07/24/2017	30	68	134.2%
03/05/2018	90	224	122.2%
10/09/2018	60	218	83.7%

57. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3326545, which has a full charge of 120 pounds, at store 035::688 301 S Bowen Rd, Arlington, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
10/14/2017	30	150	60.8%

58. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3326550, which has a full charge of 120 pounds, at store 035::688 301 S Bowen Rd, Arlington, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
11/15/2016	75	13	1754.8%

59. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3326821, which has a full charge of 150 pounds, at store 035::695 5701 W Pleasant Ridge Rd, Arlington, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
09/17/2017	30	129	56.6%

60. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3326825, which has a full charge of 120 pounds, at store 035::695 5701 W Pleasant Ridge Rd, Arlington, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
08/01/2015	30	177	51.6%
08/03/2015	60	2	9125.0%

61. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3185999, which has a full charge of 1500 pounds, at store 536::205 E Little Creek Rd Norfolk, Virginia. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
7/09/2016	200	94	51.8%
8/26/2016	820	48	415.7%
9/14/2016	662	19	847.8%
1/19/2017	200	127	38.3%
11/30/2018	1078	319	82.2%

62. On June 11, 2019, Kroger reported the refrigerant additions to CRA 4030224, which has a full charge of 855.6 pounds, at store 615::005 1305 E Kansas Ave, Garden City, Kansas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
7/29/2016	160	172	39.7%

63. On June 11, 2019, Kroger reported the refrigerant additions to CRA 4046925, which has a full charge of 1250 pounds, at store 620::013 1375 E South Boulder Rd, Louisville, Colorado. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
11/16/2018	510	249	59.8%

64. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3390413, which has a full charge of 2300 pounds, at store 660::070 14845 E Shea Blvd, Fountain Hills, Arizona. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
2/03/2017	270	17	252.0%

65. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3402114, which has a full charge of 950 pounds, at store 660::051 1950 W Ray Rd, Chandler, Arizona. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
7/03/2017	249	122	78.4%

66. On June 11, 2019, Kroger reported the refrigerant additions to CRA 650501, which has a full charge of 3500 pounds, at store 701::604 22303 Mountain Hwy E, Spanaway, Washington. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
4/17/2016	1025	24	445.4%
6/19/2017	2280	428	65.1%
10/30/2017	630	133	49.4%

67. On June 11, 2019, Kroger reported the refrigerant additions to CRA 654553, which has a full charge of 900 pounds, at store 701::653 1501 E Parks Hwy, Wasilla, Alaska. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
4/14/2016	60	17	143.1%

68. On June 11, 2019, Kroger reported the refrigerant additions to CRA 658114, which has a full charge of 1050 pounds, at store 701::613 3527 S Federal Way, Boise, Idaho. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/27/2016	90	33	94.8%
6/29/2016	210	2	3650.0%
7/20/2016	30	21	49.7%

69. On June 11, 2019, Kroger reported the refrigerant additions to CRA 658115, which has a full charge of 2080 pounds, at store 701::613 3527 S Federal Way, Boise, Idaho. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
12/15/2015	56	13	75.6%
1/23/2017	300	116	45.4%

70. On June 11, 2019, Kroger reported the refrigerant additions to CRA 661048, which has a full charge of 1950 pounds, at store 701::5 2500 Santiam Hwy SE, Albany, Oregon. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/16/2017	120	20	112.3%

71. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3003519, which has a full charge of 1050 pounds, at store 703::279 4700 Admiralty Way, Marina Del Rey, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
5/02/2018	510	854	48.6%

72. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3007030, which has a full charge of 1215 pounds, at store 703::656 201 Madonna Rd, San Luis Obispo, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
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4/13/2016	150	2	2253.1%
9/22/2016	210	162	38.9%
7/19/2017	300	33	273.1%

73. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3007031, which has a full charge of 1350 pounds, at store 703::656 201 Madonna Rd, San Luis Obispo, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/20/2016	90	4	608.3%

74. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3007032, which has a full charge of 1200 pounds, at store 703::656 201 Madonna Rd, San Luis Obispo, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/21/2016	120	4	912.5%

75. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3007281, which has a full charge of 1631 pounds, at store 704::364 3200 W Century Blvd, Inglewood, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
10/12/2017	210	83	56.6%
8/23/2018	300	8	839.2%
9/14/2018	300	22	305.2%

76. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3007282, which has a full charge of 1000 pounds, at store 704::364 3200 W Century Blvd, Inglewood, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/21/2016	300	53	206.6%
8/31/2016	650	71	334.2%
3/09/2017	180	59	111.4%
5/02/2017	150	36	152.1%

77. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3007378, which has a full charge of 500 pounds, at store 704::375 1091 S Hoover St, Los Angeles, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
1/31/2017	270	295	66.8%
10/07/2017	300	249	88.0%
11/20/2017	150	44	248.9%

78. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3024044, which has a full charge of 1750 pounds, at store 704::764 300 Atlantic Ave, Pittsburg, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
5/02/2015	270	12	469.3%
5/14/2015	390	12	677.9%
5/19/2015	270	5	1126.3%
5/22/2015	390	3	2711.4%
6/12/2015	480	21	476.7%
12/02/2015	180	8	469.3%
5/04/2016	300	2	3128.6%
5/03/2017	450	57	164.7%
5/18/2017	1255	15	1745.0%
6/20/2017	120	33	75.8%
7/06/2017	750	16	977.7%
10/17/2017	270	103	54.7%
6/30/2018	300	18	347.6%
7/12/2018	300	12	521.4%
8/19/2018	300	38	164.7%

79. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3027377, which has a full charge of 930 pounds, at store 703::293 1233 N La Brea Ave, West Hollywood, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
11/23/2017	840	8	4121.0%

80. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3027379, which has a full charge of 1180 pounds, at store 703::293 1233 N La Brea Ave, West Hollywood, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
10/25/2018	300	253	36.7%



81. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3038154, which has a full charge of 750 pounds, at store 704::766 5100 N Figueroa St, Los Angeles, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
2/15/2016	360	27	648.9%
8/29/2016	180	196	44.7%
3/26/2017	210	209	48.9%
8/23/2017	120	150	38.9%

82. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3038155, which has a full charge of 550 pounds, at store 704::766 5100 N Figueroa St, Los Angeles, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/09/2017	240	18	884.8%
7/03/2017	150	24	414.8%

83. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3038156, which has a full charge of 1000 pounds, at store 704::766 5100 N Figueroa St, Los Angeles, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
8/02/2016	170	77	80.6%
9/11/2018	210	160	47.9%

84. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3038170, which has a full charge of 1350 pounds, at store 704::314 8530 Tobias Ave, Panorama City, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
11/06/2018	800	74	292.3%

85. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3038171, which has a full charge of 950 pounds, at store 704::314 8530 Tobias Ave, Panorama City, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
7/16/2017	360	20	691.6%

86. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3038172, which has a full charge of 750 pounds, at store 704::314 8530 Tobias Ave, Panorama City, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
8/16/2016	120	56	104.3%
11/06/2018	500	138	176.3%

87. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3038218, which has a full charge of 1740 pounds, at store 704::306 44455 Valley Central Way, Lancaster, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
12/09/2015	180	5	755.2%
2/09/2018	240	36	139.8%

88. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3101209, which has a full charge of 900 pounds, at store 705::837 22131 SE 237th St, Maple Valley, Washington. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
5/06/2016	104	17	248.1%
6/10/2016	145	35	168.0%

89. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3137043, which has a full charge of 1244 pounds, at store 705::206 6411 SE Milwaukie Ave, Portland, Oregon. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
2/02/2018	90	52	50.8%

90. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3420408, which has a full charge of 640 pounds, at store 706::477 750 N Main St, Logan, Utah. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
2/26/2017	60	95	36.0%

91. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3421275, which has a full charge of 2800 pounds, at store 706::180 906 Camel Dr, Gillette, Wyoming. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
10/08/2015	120	41	38.2%
10/28/2017	120	43	36.4%

92. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3423164, which has a full charge of 1350 pounds, at store 706::376 2385 E Windmill Ln, Las Vegas, Nevada. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
4/15/2016	120	59	55.0%
7/14/2016	240	90	72.1%
1/05/2017	240	175	37.1%
4/16/2018	307	71	116.9%
7/01/2018	210	76	74.7%

93. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3423165, which has a full charge of 1350 pounds, at store 706::376 2385 E Windmill Ln, Las Vegas, Nevada. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
7/13/2015	240	24	270.4%
7/28/2015	135	15	243.3%
8/24/2015	620	27	620.9%
4/14/2016	120	85	38.2%
7/14/2016	300	91	89.1%
8/06/2016	400	23	470.2%
12/09/2016	335	125	72.5%
3/15/2017	180	96	50.7%
4/06/2017	120	22	147.5%
7/16/2017	180	101	48.2%
7/19/2018	100	3	901.2%

94. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3423237, which has a full charge of 1800 pounds, at store 706::345 2385 E Windmill Ln, Las Vegas, Nevada. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
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4/06/2017	60	8	152.1%
7/26/2017	240	111	43.8%

95. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3423238, which has a full charge of 2475 pounds, at store 706::345 2385 E Windmill Ln, Las Vegas, Nevada. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
7/18/2016	1650	97	250.9%
6/30/2017	270	70	56.9%
7/12/2017	150	12	184.3%
7/21/2017	180	9	294.9%

96. On June 11, 2019, Kroger reported the refrigerant additions to CRA 4036404, which has a full charge of 923.7 pounds, at store 615::088 4015 SW 10th Ave, Topeka, Kansas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/16/2015	180	27	263.4%
7/01/2015	150	15	395.1%
1/22/2016	200	205	38.6%
12/02/2016	185	15	487.4%

97. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3423165, which has a full charge of 1350 pounds, at store 706::376 2385 E Windmill Ln, Las Vegas, Nevada. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
1/28/2019	1297	193	181.7%

98. On June 11, 2019, Kroger reported the refrigerant additions to CRA 011465RACKB, which has a full charge of 1400 pounds, at store 011::465 3425 Cascade Rd SW, Atlanta, GA. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
2/13/2019	120	58	53.9%
2/24/2019	420	11	995.5%

99. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3446812, which has a full charge of 61 pounds, at store 016::832 2129 S Main St, Bellefontaine, Ohio. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
3/04/2019	24	39	368.2%

100. On June 11, 2019, Kroger reported the refrigerant additions to CRA 4039017, which has a full charge of 854 pounds, at store 615::010 725 E 4Th Ave, Hutchinson, Kansas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
3/04/2019	169	24	301.0%

101. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3007378, which has a full charge of 500 pounds, at store 704::375 1091 S Hoover St, Los Angeles, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
1/15/2019	500	27	1351.9%`

102. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3007379, which has a full charge of 1450 pounds, at store 704::375 1091 S Hoover St, Los Angeles, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
1/03/2019	270	44	154.5%
1/15/2019	901	12	1890.0%

103. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3024044, which has a full charge of 1750 pounds, at store 704::764 300 Atlantic Ave, Pittsburg, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
1/18/2019	300	152	41.2%

104. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3423164, which has a full charge of 1350 pounds, at store 706::376 2385 E Windmill Ln, Las Vegas, Nevada. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
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1/28/2019	666	211	85.3%
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105. On June 11, 2019, Kroger reported the refrigerant additions to CRA 3423165, which has a full charge of 1350 pounds, at store 706::376 2385 E Windmill Ln, Las Vegas, Nevada. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
1/28/2019	1297	193	181.7%

106. On June 11, 2019, Kroger reported the refrigerant additions to CRA 4036404, which has a full charge of 923.7 pounds, at store 615::088 4015 SW 10th Ave, Topeka, Shawnee County, Kansas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
2/04/2019	255	69	146.0%
2/14/2019	90	10	355.6%

107. On April 14, 2019, Kroger reported the refrigerant additions to the Pasta Chiller, an IPRU with a full charge of 530 pounds, at HK.B. Specialty Foods 1225 N Broadway St., Greensburg, Indiana. EPA calculated the corresponding Leak Rates with Method 1 and Method 2:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate	Method 2 Leak Rate
9/15/2017	270	36	516.5%	90.6%

108. On April 14, 2019, Kroger reported the refrigerant additions to the Main System Glycol/Freezers, an IPRU with a full charge of 5,075 pounds, at LaHabra Bakery, 850 S. Cypress, La Habra, California. EPA calculated the corresponding Leak Rates with Method 1 and Method 2:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate	Method 2 Leak Rate
4/04/2016	1000	112	64.2%	40.0%
10/01/2018	500	68	52.9%	78.8%

109. On June 11, 2019, Kroger reported the refrigerant additions to CCA 011465AC1, which has a full charge of 160 pounds, at store 011::465 3425 Cascade Rd SW, Atlanta, Georgia. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
7/24/2015	60		37.5%
7/27/2015	30	3	2281.3%
5/03/2017	38.8	2	4425.6%
5/03/2017	44	2	5018.8%
6/15/2017	45	43	238.7%

110. On June 11, 2019, Kroger reported the refrigerant additions to CCA 3315677, which has a full charge of 150 pounds, at store 034::376 18518 Kuykendahl Rd, Spring, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/29/2018	145	233	151.4%

111. On June 11, 2019, Kroger reported the refrigerant additions to CCA 3315678, which has a full charge of 150 pounds, at store 034::376 18518 Kuykendahl Rd, Spring, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
3/07/2018	90	525	60.0%

112. On June 11, 2019, Kroger reported the refrigerant additions to CCA 3315679, which has a full charge of 150 pounds, at store 034::376 18518 Kuykendahl Rd, Spring, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
7/17/2018	200	36	1351.9%

113. On June 11, 2019, Kroger reported the refrigerant additions to CCA 3326520, which has a full charge of 150 pounds, at store 035::688 301 S Bowen Rd, Arlington, Texas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
10/06/2016	60	104	140.4%

114. On June 11, 2019, Kroger reported the refrigerant additions to CCA 4030240, which has a full charge of 270 pounds, at store 615::005 1305 E Kansas Ave, Garden City, Kansas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/09/2015	63	203	42.0%
6/21/2017	130	327	53.7%

115. On June 11, 2019, Kroger reported the refrigerant additions to CCA 4030241, which has a full charge of 270 pounds, at store 615::005 1305 E Kansas Ave, Garden City, Kansas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
6/21/2017	87	327	36.0%

116. On June 11, 2019, Kroger reported the refrigerant additions to CCA 4037833, which has a full charge of 283 pounds, at store 615::037 6829 SW 29th St, Topeka, Kansas. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
9/16/2016	40	1	5159.0%

117. On June 11, 2019, Kroger reported the refrigerant additions to CCA 3038173, which has charge of 350 pounds, at store 704::314 8530 Tobias Ave, Panorama City, California. EPA calculated the corresponding Leak Rates with Method 1:

Date of Refrigerant Transaction	Pounds of Refrigerant Added	Number of Days Since Refrigerant Last Added	Method 1 Leak Rate
9/19/2018	240	33	758.4%
11/06/2018	316	48	686.5%

118. The Workbook provided in Kroger's June 11, 2019 response contained descriptions of service or repairs conducted on appliances, identified the date of such each such service or repair, and identified the amount of refrigerant added at the time of each service or repair. The spreadsheet's column for the descriptions is titled "Call Notes."
119. The Call Notes for the following dates and appliances each includes a statement that a technician added refrigerant to the appliance. However, the Call Notes do not state the amount of refrigerant added, and the corresponding cell for the amount of refrigerant transacted is blank.

Date	Division, Store, Address, City, State	Equipment ID
4/07/2015	011::465 3425 Cascade Rd SW, Atlanta, GA	011465RACKB
1/10/2017	011::465 3425 Cascade Rd SW, Atlanta, GA	011465RACKA
1/26/2017	011::465 3425 Cascade Rd SW, Atlanta, GA	011465RACKA
4/06/2015	016::880 1608 Marion-Mount Gilead Rd, Marion, OH	3443367



Date	Division, Store, Address, City, State	Equipment ID
2/27/2016	016::880 1608 Marion-Mount Gilead Rd, Marion, OH	3443364
4/18/2016	016::880 1608 Marion-Mount Gilead Rd, Marion, OH	3443365
11/14/2017	021::836 302 W Market St, Warsaw, IN	836RAC1
10/23/2015	025::410 676 N Germantown Pkwy, Cordova, TN	4007507
2/23/2017	025::410 676 N Germantown Pkwy, Cordova, TN	4007507
7/21/2016	615::005 1305 E Kansas Ave, Garden City, KS	4030224
8/12/2016	615::037 6829 SW 29th St, Topeka, KS	4037793
5/27/2015	615::119 1159 E US Highway 54, Camdenton, MO	4013003
7/15/2016	620::013 1375 E South Boulder Rd, Louisville, CO	4105006
11/20/2015	620::025 11747 W Ken Caryl Ave, Littleton, CO	4057402
6/15/2017	620::025 11747 W Ken Caryl Ave, Littleton, CO	4057402
9/28/2017	620::025 11747 W Ken Caryl Ave, Littleton, CO	4057401
12/29/2018	660::027 3616 E Ray Rd, Phoenix, AZ	3399738
2/03/2017	701::005 2500 Santiam Hwy SE, Albany, OR	661048
8/23/2016	701::653 1501 E Parks Hwy, Wasilla, AK	654553
7/21/2015	706::459 8100 Wyoming Blvd NE, Albuquerque, NM	3417256
4/26/2018	706::459 8100 Wyoming Blvd NE, Albuquerque, NM	3417255
1/15/2016	704::782 20801 Bear Valley Rd, Apple Valley, CA	3011203
7/13/2015	704::782 20801 Bear Valley Rd, Apple Valley, CA	3029054
6/24/2015	706::376 2385 E Windmill Ln, Las Vegas, NV	3423164
12/24/2016	706::376 2385 E Windmill Ln, Las Vegas, NV	3423164
4/26/2018	706::459 8100 Wyoming Blvd NE, Albuquerque, NM	3417255
10/08/2016	706::477 750 N Main St, Logan, UT	3420409

### **Finding of Violations**

120. As set forth in paragraphs 37 through 96, above, in 2015, 2016, 2017, and 2018, Kroger failed to repair the leaks on a CRA to bring the annual leak rate to below 35 percent, and Kroger failed to develop a 1-year retrofit or retirement plan for the CRA according to 40 C.F.R. § 82.156(i)(6). Kroger thereby violated 40 C.F.R. § 82.156(i)(1).
121. As set forth in paragraphs 97 through 106, above, in 2019, Kroger failed to repair the leaks on a CRA to bring the annual leak rate to below 20 percent, and Kroger failed to develop a 1-year retrofit or retirement plan for the CRA according to 40 C.F.R. § 82.157(c)(2)(i). Kroger thereby violated 40 C.F.R. § 82.157(c)(2)(i).
122. As set forth in paragraphs 107 and 108, above, in 2016, 2017, and 2018, Kroger failed to repair the leaks on an IPRU to bring the annual leak rate to below 35 percent, and Kroger failed to develop a 1-year retrofit or retirement plan for the CRA according to 40 C.F.R. § 82.156(i)(6). Kroger thereby violated 40 C.F.R. § 82.156(i)(2).
123. As set forth in paragraphs 109 through 117, above, in 2015, 2016, 2017, and 2018, Kroger failed to repair the leaks on a CCA to bring the annual leak rate to below 15

percent, and Kroger failed to develop a 1-year retrofit or retirement plan for the CCA according to 40 C.F.R. § 82.156(i)(6). Kroger thereby violated 40 C.F.R. § 82.156(i)(1).

124. On the dates and at the appliances set forth in paragraph 118, Kroger failed to keep records of refrigerant added to a CCA or CRA in violation of 40 C.F.R. § 82.166(k).

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Date

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Michael D. Harris  
Director  
Enforcement and Compliance Assurance Division